Trapping Safety





Content Standard - Students demonstrate an understanding of potential risks to their personal health, safety, and welfare from trapping activities



Develop safe habits around water and animals

Introduction

Trapping is not a dangerous activity, but there are risks related to weather, drowning, animal bites, and disease. Develop safe attitudes. Make safe behavior a habit.



Describe the conditions that cause hypothermia, symptoms of its presence, and treatment procedures

Hypothermia is a leading cause of death among people who enjoy outdoor recreation. Cold weather, wind, and water can lead to a loss of body heat. When your body temperature starts to lower, hypothermia sets in.

Shivering is one of the first signs of hypothermia. When this happens, go to a warm place, put on warmer clothes, or build a fire. Soon after shivering starts, a person may become confused, and clumsy. Watch for signs of hypothermia whenever you are outdoors in cooler weather. Even when air temperatures are in the 50's, hypothermia can occur.



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Hypothermia is a leading cause of death among people who participate in outdoor activities

峰 Explain how to prevent hypothermia

Trappers can prevent hypothermia by wearing warm, dry clothing. Wool clothes are a good choice. Wool insulates even when wet.

Use hip boots or waders, plus long-sleeved rubber gloves when trapping in water. If you get wet return to home or camp and put on dry clothes.







Recognize the symptoms of frostbite and treatment procedures

Frostbite occurs when ice crystals form in your body's cells. It is a common cold weather injury to people's cheeks, ears, nose, toes, and fingers. Frostbite symptoms include white to grayish yellow skin and an intense cold, numb feeling. Pain and blisters may also be present. Protect frostbitten skin from further injury. Drink warm fluids, put on more clothes, or wrap up in blankets. The frozen area can be soaked in warm water (102 to 105 degrees F). Never rub frostbitten skin. Rubbing will cause further injury.



Recognize the danger of traveling on ice covered 🌌 lakes, ponds, rivers, and streams

Avoid traveling on ice-covered streams and rivers. Water currents cause weak, dangerous ice. Ice on a pond or lake is usually more consistent, but be cautious. Springs, underwater structure, and other conditions can cause weak spots on lakes and ponds. Movement of beaver and muskrat under the ice can make the ice thin in certain areas, especially between their house or lodge and their food cache.

Newly formed clear ice is generally the strongest. Some trappers consider three inches of ice to be the minimum thickness needed for one person to safely cross, but four inches is better. Six inches or more of strong ice is required for multiple people, or snowmobiles.

White ice, or ice mixed with snow and slush, is weaker than clear ice. Candle ice, usually found in the early spring, forms when good ice starts to decompose. Candle ice may be unsafe, even if it is two feet thick. Ice cleats can help you maintain safe footing. Carry a walking staff to help you check for ice conditions in front of you as you travel.

Many trappers carry ice safety picks while working their traplines. Ice safety picks have strong handles with short spikes in the ends. The handles are tied together with rope. Thread the rope and picks through the sleeves and back of your coat so you will have them handy if you fall through. It is difficult to pull yourself out of the water without ice picks.

If you do fall through the ice, try to climb out by facing the direction you came from when the ice gave way. When you get out, roll in the direction you came from when you fell through. The ice may be even weaker if you try to go a different direction.

Frostbite is a common injury. Don't rub a frostbitten area. Warm it gently.



Trapper Chopping Ice



Trapper fell through ice



Silvertip Productions Ice safety picks

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If a companion falls through, lie down on the ice to distribute your weight. Reach out to the victim with a walking staff, or throw them a rope. If you approach too close, you may fall in, too.

After escaping from icy water, build a fire immediately unless you are close to shelter or a vehicle where you can get warm. After falling into icy water, hypothermia will set in quickly. If you have a cell phone with you, call for help immediately.



Trapper wading in stream



Recognize dangers related to drowning while wading or trapping near water

Trappers need to be aware of the danger of drowning. It is easy to slip and fall down a steep bank, or slip into deep water holes of rivers and streams when wading. It is difficult to swim when wearing waders or hip boots, or when your coat pockets are filled with heavy gear.

It is a good idea to wear an inflatable personal flotation vest when trapping around water. Good ones have a gas canister that can be used to inflate the vest instantly if you need it. The vest should also have a tube you can use to inflate it by mouth if the gas canister fails.

When wading, it is best to travel upstream because the water depth generally increases gradually. You are more likely to encounter steep drop-offs caused by currents when walking downstream.

Use a walking staff when wading to probe the water depth and bottom conditions. Smooth rocks or debris in the water can cause you to slip. You may encounter soft bottoms or hazardous conditions at points where two streams come together.

If you use a canoe or a boat for trapping follow all safety regulations. Take a boating safety education course.



Trapper with canoe



Explain how to manage the risks of contracting diseases or parasites including rabies, West Nile virus, tularemia, Lyme disease, mange, and trichinosis

Note: The section below pertains to parasites, bacteria, and viruses that cause infection and disease in Michigan. There are other diseases that have





been found in furbearers in other states and Canadian provinces but they have not been identified in our state.

Wild animals can carry a number of diseases that are infectious to humans (zoonotic diseases). Some diseases are specific to one or a few species of furbearers, while other diseases affect many species. Wildlife diseases transmittable to humans or domestic pets should be of concern to anyone who regularly encounters or handles wildlife.

Infectious diseases can be caused by numerous organisms and may spread by direct and/or indirect contact with infected animals. Trappers can also be exposed to parasites that infect wild animals. Follow the recommended precautions to protect yourself from potential hazards. If you become ill make certain your doctor is aware of your trapping activities.

General precautions include:

- Wear latex or other protective gloves, eye protection, and protective coveralls when handling carcasses or scat
- Wash hands and arms thoroughly with soap and water after handling animals
- Clean and disinfect knives, skinning boards, cutting surfaces, and other equipment with a solution of 1.5 cups household bleach in 1 gallon of water
- Avoid sick animals or ones that do not act normal
- Do not drink untreated water from lakes or streams
- Cook all wild game thoroughly

Animal diseases and parasites that may affect humans include:

Rabies - Hydrophobia - Rabies is caused by a virus that infects the central nervous system. Left untreated, rabies is usually fatal (only a few humans are known to have survived). The rabies virus may be contracted by all warm blooded mammals but in Michigan it occurs most often among bats, skunks, and foxes. The rabies virus is in the saliva of an infected animal and is usually transmitted via a bite. Rabies can also be transmitted by contamination of a cut or scratch when skinning an infected animal, or from contact with your eyes, nose, or mouth with the infected animal's saliva.

Rabies occurs in two forms in wildlife; "dumb" and "furious". In the dumb



Silvertip Productions
Wear latex gloves



Silvertip Productions
Raccoons can carry several
diseases

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Center for Disease Control
Mosquitos may transmit the
West Nile virus



Center for Disease Control
Tularemia thumb lesion caught
from muskrat



Cottontail Rabbits may carry tularemia

form the animal is lethargic and may suffer paralysis. In the furious form the animal is restless, aggressive, and may bite at real or imaginary objects.

If you are bitten by a wild animal, wash the bite with soap and water, and then seek medical attention immediately. If possible, capture or kill the animal without damaging the head. Contact your local (county) health department to discuss with them the possibility of having the animal's brain tissue tested for rabies. If it is going to be tested, take the animal's head to the local health department right away. If this is not possible, keep the animal refrigerated at 35 to 40 degrees F until it can be examined. Human rabies vaccines can offer protection from the rabies virus without serious side effects. Ask your doctor for advice about a rabies vaccination, especially if you are trapping in areas where animals are known to carry rabies. In Michigan, exposure is more likely if you are trapping skunks or foxes.

West Nile Virus - West Nile virus is caused by a virus that is most often transmitted to birds, horses, and humans via the bite of a mosquito (*Culex* spp.). The incubation period, or the time between the bite of an infected mosquito and the onset of symptoms is 3 to 14 days. Most people who are infected with the West Nile virus will not have any type of symptoms. About 20% of people who become infected will develop West Nile fever. Symptoms include fever, headache, tiredness, and body aches. There may be a skin rash on the trunk of the body and swollen lymph glands. Most of these symptoms last for a few days.

The symptoms of severe infection (West Nile encephalitis or meningitis) include headache, high fever, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, and paralysis. It is estimated that approximately 1 in 150 persons infected with the West Nile virus will develop this more severe form of the disease. Older people are more susceptible. Symptoms from a severe infection may last several weeks. Neurological symptoms or damage may be permanent.

It is best to prevent exposure to the West Nile virus by avoiding mosquito bites. Stay out of the field from dusk to dawn during mosquito season. Wear long sleeve shirts, long pants, and socks when outdoors. Use a mosquito repellant containing DEET on exposed skin. The Center for Disease Control and Prevention advise that you should not use DEET repellant on skin under your clothes. Do not apply repellants containing permethrin directly to your skin.

Tularemia - Rabbit Fever - Tularemia is caused by the bacterium *Francisella tularensis* that is most commonly associated with rabbits and hares. Beavers and muskrats may also contract this disease.





Tularemia is most commonly transmitted by the bite of blood sucking vectors (ticks, mosquitoes, flies, mites, midges, blackflies, lice, and fleas). The bacteria enter the body, multiply, and invade internal organs. The liver and spleen enlarge and become covered with white spots. Humans can get tularemia from skinning infected animals, drinking contaminated water, getting bitten by one of the infected blood sucking vectors, by inhalation of feces-contaminated dust, and sometimes by eating undercooked meat. Symptoms include fever, infected sores, swollen lymph nodes and flu-like symptoms which may become severe. With prompt antibiotic treatment, few cases of tularemia are fatal. However, human fatalities from tularemia have occurred in Michigan.

Lyme Disease - Lyme disease is a bacterial infection spread by the bite of the blacklegged tick (*Ixodes scapularis*). When diagnosed early, the disease can effectively be treated with antibiotics.

People contract Lyme disease when they are bitten by ticks carrying the bacterium *Borrelia burgdorferi*. Ticks that are infected with the Lyme disease organism are very small and can be hard to see. If these tiny ticks bite mice infected with Lyme disease and then bite people or other animals the disease can be passed on. After several days or weeks the bacteria may spread throughout the body of an infected person.

Diagnosis is difficult because Lyme disease symptoms vary and are similar to other common illnesses. One of the first symptoms may be a red circular rash, but this is not present in all cases. Other early symptoms are flu-like and may include chills, weakness, headaches, nausea, fever, stiff neck, dizziness, muscle aches, sore throat, and swollen glands. In advanced stages, more serious symptoms may occur including facial paralysis, kidney damage, arthritis, and heart problems. Consult your physician if you believe you have symptoms of Lyme disease.

Prevent Lyme disease by preventing tick bites. Wear light colored clothing when walking in tick habitat. Wear long sleeves and long pants. Check yourself thoroughly for ticks. If bitten by a tick, remove it promptly and disinfect the bite with rubbing alcohol.

Leptospirosis - Leptospirosis is caused by the bacteria Leptospira spp. that infects humans and animals. Almost all mammals can be infected, but it is more common in domestic animals than wildlife. The disease is known to infect striped skunks, raccoons, foxes, opossums, bobcats, muskrats, woodchucks, and mice. Leptospirosis is transmitted by eating infected animals, contact with the urine of an infected animal, or contact with urine-contaminated water. Contact with the urine or urine-contaminated water allows the bacteria to enter the body through skin wounds, mucous membranes, or cuts. Leptospirosis bacteria multiply in the blood stream. The disease affects the kidney and



Ticks that carry Lyme disease

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Center for Disease Control
Lone star tick - carries Rocky
Mountain spotted fever

the bacteria is shed via the urine. Infection can cause flu-like symptoms in humans including headache, fever, muscle ache, vomiting, and kidney damage. Antibiotics are very effective for treatment if given early in the course of the disease.

Rocky Mountain Spotted Fever - Rocky Mountain Spotted Fever is caused by the bacterium Rickettsia rickettsii that is transmitted by ticks. In Michigan it is transmitted primarily by the American Dog Tick (*Dermacentor variabilis*). Symptoms include a sudden onset of fever that lasts for 2-3 weeks, muscle pain, headaches, chills, and weakness. A rash may develop on the hands, arms, and legs and then spread to the rest of the body. Furbearers may harbor the infected ticks. The disease occurs most often in the eastern half of the United States. Limiting exposure to ticks is the most effective way to reduce the likelihood of infection.

Sarcoptic Mange - Sarcoptic Mange is caused by a parasitic mite Sarcoptes scabiei. It occurs throughout North America and is most commonly found among red fox, coyotes, wolves, raccoons, bears, porcupines, and domestic dogs. Adult female mites burrow under the skin and lay their eggs. This causes severe itching, which makes the animal scratch, chew, or lick the infected area, leading to inflammation and secondary bacterial infection. The condition worsens when the eggs hatch. The animal's hair falls out. The skin thickens, cracks, and gets crusted with scabs. Mange is nearly always fatal to red foxes, and is sometimes fatal to coyotes, wolves, and porcupines. The mite is transmitted among animals through direct contact or by contact with contaminated areas such as dens or burrows. People can become infested with mites by handling mange infested animals. However, the infestation is usually less severe and does not last as long.

Trichinosis - Trichinosis is caused by the nematode worm *Trichinella spiralis*. The disease results from eating raw or undercooked pork or wild animals infected with the roundworm parasite. It affects people and many domestic and wild animals. The parasite forms cysts in muscle tissue.

Cook furbearer meat thoroughly until the juices run clear. Freezing game meat, even for long periods, will not kill all worms. Likewise, curing (salting), drying, smoking, or microwaving meat does not consistently kill infective worms. See page 114 for more details on how to prepare furbearer meat for human consumption.

Giardiasis - Giardiasis is caused by the protozoan Giardia intestinalis (or G. lamblia). This parasite lives in the intestinal tract of an infected individual and can be carried by many animals, including beavers. It is shed in scat. Beavers do not appear to be severely affected by the disease, but infected beavers can contaminate water sources used by people. Giardiasis spreads from



NPS Phot

Beaver

DNR BOOK



drinking contaminated water or eating contaminated food. Human symptoms include diarrhea, cramping, weakness, and mild fever. The condition can last 1-2 weeks, go away, and then recur It can be treated effectively with antibiotics.

Raccoon Roundworms - The intestinal roundworm of raccoons, Baylisascaris procyonis, is a common parasite that can cause a fatal nervous system disease in a variety of bird and mammal species. Infected animals may show signs similar to rabies. The worms develop to maturity in the raccoon intestine, where they produce millions of eggs that are passed from the raccoon with the feces. Released eggs take 2-4 weeks to become infective to other animals and humans. The eggs can survive in the environment for years.

Raccoons defacate in specific places (called 'latrines') over a period of time. Likely places are at the base of trees, barn lofts, sand boxes, chimneys, attics, or on high surfaces such as rocks or roofs. People become infected when they accidentally ingest the eggs. The eggs can become airborne as dust where people can inhale them. When humans eat or inhale raccoon roundworm eggs, they hatch into larvae in the person's intestine and travel through the body, affecting the organs and muscles. Severity depends on how many eggs are ingested and where in the body the larvae spread. Symptoms can include nausea, tiredness, loss of coordination, and blindness. Human infection, while rare, can be fatal, especially in children.

Echinococcosis - (Hydatid Disease) - Echinococcosis is caused by infection with the larval stage of the tapeworm Echinococcus granulosus, a microscopic tapeworm found in coyotes and wolves. Infection in the intermediate host (white-tailed deer and moose) causes parasitic cysts to develop in the liver, lungs, kidneys, spleen, nervous tissue, or bone. The disease may be fatal. Coyotes and wolves (and dogs) are infected when they eat Echinococcus granulosus infected deer or moose. Once the canine is infected, the tapeworm matures in its intestine where it lays eggs that are passed with the feces. The infectious tapeworm eggs are too tiny to see and will stick to anything.

People can contract Echinococcosis by ingesting eggs in game meat, on pelts, or from feces-contaminated food, water, or soil. Surgery is usually required to remove the parasitic cysts. Medication may also be required. Use latex gloves when skinning animals, wash your hands thoroughly, and disinfect your work areas to prevent this disease.

Tapeworms and Other Parasites - People can contract tapeworms and other parasites via accidental ingestion following contact with furbearer or dog feces. Keep your hands clean to prevent accidental ingestion of the microscopic eggs.



FWS Photo

Raccoon



Center for Disease Control
Cotton rat - died from
echinococcis

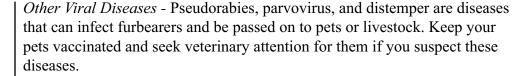


Center for disease Control Tapeworms

Trapping Safety



Texas Parks and Wildlife **Bobcat**





Recognize and manage the risks for being bitten or injured by wild or domestic animals

Animal bites and scratches can cause serious injuries and infections. Wash wounds thoroughly with soap and water, apply bandages, and seek medical assistance. Keep the animal confined for observation if possible. If you can't confine the animal, kill it without damaging the head. Health authorities may want to test it for rabies (see page 98 for more details). Be careful when releasing domestic animals; they may bite if they are afraid.

See the chapter on "Running a Trapline" for information on safe ways to release animals from traps to prevent bites and scratches.



Recognize the importance of making yourself visible to hunters

Trappers should make themselves visible to hunters. Wear hunter orange clothing, especially during hunting seasons where orange clothing may be required for hunters. Trappers have occasionally been wounded by hunters who fail to see the trapper, or by hunters who fail to properly identify their target. Wearing blaze orange clothing will also make it easier to find you if you are lost, injured, or sick.



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Always use a safety gripper when setting large bodygripping traps

Recognize and manage the risks of setting large body-gripping traps for beaver

Some traps, such as large body-gripping traps used for beaver, can be dangerous to a trapper who doesn't know how to use them. If you are accidentally caught in a large trap you need to know how to release yourself, which may be difficult if you can't use one of your arms. Large body-gripping traps are most often set under water. You can drown or die from hypothermia if you get caught in a large trap set underwater.

When using large body-gripping traps carry setting tongs and a length of rope with a loop in the end. Keep it in a pocket where you can easily reach it with





one hand. If you are caught, thread the rope through the ends of the springs. Put your foot in the loop and use your free arm to pull the loose end. This releases the pressure on the springs so you can free yourself.



Describe the rules of firearm safety that apply to trapping

Many trappers carry firearms to shoot animals caught in traps. Take a hunter education course to learn about firearm safety. Practice safe habits around firearms at all times. Note: Successful completion of a hunter education course is required to carry a firearm afield in Michigan.

When trapping it is a good idea to keep your firearm unloaded until you need to use it. It can be difficult to maintain control of a firearm when you are carrying gear and making sets.

When you shoot a firearm at an animal in a trap be careful about ricochets off the trap or rocks. If you are trapping with companions, everyone should stand behind the shooter.

Always look beyond your target when shooting a firearm and only shoot if it is safe. Keep the muzzle under control and pointed in a safe direction at all times, even when the gun is not loaded.



Know the importance of carrying a map and compass when trapping

It is easy to get lost if you are in unfamiliar territory. When you are looking for sign and places to make sets you may not be paying close attention to landmarks and trails. Always carry a compass and a map of the place you are trapping. Many people carry a global positioning system (GPS) unit. If you carry a GPS, make certain you know how to use it. Carry a compass for a backup.

Firearm Safety

- Treat every gun as if it is loaded
- Control muzzle direction
- Be sure of your target & beyond
- Keep barrel & action clear of obstructions
- Unload firearms when not in use
- Never point a firearm at anything you do not intend to shoot
- Don't climb a fence or tree, or jump a ditch with a loaded gun
- Never shoot at a flat, hard surface or water
- Store firearms & ammo separately
- * Avoid alcoholic beverages while hunting or trapping

Trapping Safety



Use the "buddy system." It could save your life!



Explain important rules for survival including the use of a buddy system, the need to tell someone where you are going and when you plan to return, the value of a wireless phone, and the need to carry matches or firestarters

Although many people trap alone it is best to use a buddy system for any outdoor activity. That way if you are injured or sick your buddy can assist you, or go for help.

Always tell your family exactly where you are going and when you plan to return. If you change locations or plans, let your family know. Leave a map of your trapline at home.

Wireless phones are a good safety tool for trappers. Do not rely on the phone to get you out of all situations though. You could be out of range or find yourself with a dead battery when you need your phone the most.

A trapper must know how to start a fire. Carry waterproof matches and firestarters with you at all times. If you find yourself in a hypothermia situation it may be difficult to start a fire without a firestarter



Explain the importance of wearing a seatbelt when traveling to or from trapping areas

Trappers need to be careful when driving. Wear a seatbelt. You may need to pull off the road in unusual places where other drivers are not expecting a car. Trappers develop a keen eye for observation, but you should not be intent on watching fields and other habitats when you are supposed to be watching the road. Hunters often say that driving to and from hunting locations is more dangerous than hunting activity itself. The same can be said for trapping.

Buckle up! Drive Safe!



